

Remarks

Entry of the amendments, reconsideration of the application, as amended, and allowance of all pending claims are respectfully requested. Claims 1-46 remain pending.

With the above amendments, applicants are further defining one or more aspects of their invention. For instance, applicants are further defining a set of I/O communications subadapters in the independent claims; further defining an I/O subsystem in one or more dependent claims; and further defining changing a set of I/O communications subadapters in one or more other dependent claims. Support for these amendments may be found throughout applicants' specification, including, for instance, in FIGs. 1C, 1F and 3; paragraph 34; paragraph 45; paragraph 49; and paragraphs 80-81. Thus, no new matter is added.

In the Office Action dated August 9, 2006, claims 12, 27 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Without acquiescing to this rejection, applicants have amended those claims to further define "changing a set of I/O communication subadapters". In particular, applicants recite that the changing includes adding, deleting or revising a definition of an I/O communications subadapter in a configuration definition defining the set. Since this is definite, applicants respectfully request withdrawal of the §112 second paragraph rejection.

Additionally, claims 1-7, 11-22, 26-38 and 42-46 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,568,648 to Coscarella et al.; and claims 8-10, 23-25 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,568,648 to Coscarella in view of U.S. Patent No. 6,519,660 to Rooney. Applicants respectfully, but most strenuously, traverse these rejections to any extent deemed applicable to the amended claims.

In one aspect, applicants' invention is directed to enhancing the maximum number of I/O communications subadapters (e.g., subchannels) available to an operating system image. As one example, the subadapters are logically partitioned into a plurality of sets and each set includes up to, for instance, 65,536 subadapters.

To further explain, an I/O communications subadapter set includes one or more I/O communications subadapters and each subadapter corresponds to an I/O device or group of I/O devices. At least one set includes a plurality of subadapters, as claimed.

In particular, applicants recite a method of enhancing input/output connectivity of a communications environment. The method includes, for instance, providing a plurality of sets of I/O communications subadapters to an operating system image of the communications environment, said plurality of sets of I/O communications subadapters providing information to the operating system image relating to a plurality of components associated with the plurality of sets of I/O communications subadapters, and wherein at least one set of I/O communications subadapters of the plurality of sets of I/O communications subadapters comprises a plurality of I/O communications subadapters. Thus, in this aspect of applicants' claimed invention, at least one set of I/O communications subadapters includes a plurality of I/O communications subadapters. Further, there are a plurality of sets of I/O communications subadapters that are available to an operating system image. This is very different from Coscarella.

In Coscarella, there are a plurality of subchannels, but there is no description, teaching or suggestion of a plurality of sets of subchannels, in which at least one set includes a plurality of subchannels, as claimed by applicants. For instance, in Coscarella, FIGs. 2 and 3A depicts a plurality of subchannels 202A-202D. Each of 202A-202D comprises one subchannel. The components listed underneath the subchannel are channel path identifiers and not subchannels. Again, each of 202A-202D includes only one subchannel. There is no description, teaching or suggestion in Coscarella of a subchannel set that includes a plurality of subchannels. There is no mention in Coscarella of combining a plurality of subchannels to form a set of subchannels. Coscarella is silent as to sets of subchannels. Since subchannel sets are missing from Coscarella, Coscarella does not anticipate nor render obvious applicants' claimed invention.

For at least the above reasons, applicants respectfully submit that applicants' invention, as claimed in the independent claims, is patentable over Coscarella. Further, the

dependent claims are patentable for the same reasons as the independent claims, as well as for their own additional features.

In one example, applicants claim enabling use of the plurality of sets of I/O communications subadapters by the operating system image, wherein the enabling use includes setting an enable indicator by the operating system image via a command executed by the operating system image to enable use of sets of I/O communications adapters (e.g., dependent claims 7, 22 and 38). Applicants respectfully submit that there is no such description, teaching or suggestion in Coscarella of enabling the use of a plurality of sets of I/O communications subadapters. Again, in Coscarella, there is no notion of sets of subchannels, and there is certainly is no teaching or suggestion of allowing the use of sets of subchannels, as opposed to just individual subchannels, as claimed by applicants. Since this is missing from Coscarella, applicants respectfully submit that their invention is patentable over Coscarella.

As a further example, in dependent claims 11, 26 and 42, applicants recite that a set of I/O communications subadapters comprises a plurality of I/O communications subadapters and is represented by a subchannel set identifier. Since Coscarella fails to describe, teach or suggest a set of subchannels, in which the set includes a plurality of subchannels, Coscarella also fails to describe, teach or suggest that the set of subchannels is represented by a subchannel set identifier. Coscarella does not need to use a subchannel set identifier, since there are no sets of subchannels in Coscarella. Instead, Coscarella describes individual subchannels. Coscarella is devoid of any teaching of a subchannel set. Since Coscarella fails to describe, teach or suggest this aspect of applicants' claimed invention, applicants respectfully submit that these claims are patentable over Coscarella.

Further, applicants respectfully submit that dependent claims 13, 28 and 44 recite that a set of I/O communications subadapters includes a different number of I/O communications subadapters than another set of I/O communications subadapters. Again, in Coscarella, there are no sets of I/O communications subadapters, but instead, individual I/O subchannels. Even if each individual subchannel of Coscarella was considered a set (which is not being conceded by applicants), Coscarella would still fail to describe, teach or suggest this aspect

of applicants' claimed invention, since each set would include the same number of subchannels (i.e., one). Thus, applicants respectfully submit that dependent claims 13, 28 and 44 are patentable over Coscarella.

In addition to the above, applicants respectfully submit that Rooney does not overcome the deficiencies of Coscarella. Again, Rooney fails to describe, teach or suggest subchannel sets, as defined and claimed by applicants. Further, Rooney fails to describe, teach or suggest one or more additional aspects of the dependent claims.

For instance, in dependent claims 8, 23 and 39, applicants recite that the plurality of sets of I/O communications subadapters are associated with a multiple image facility (MIF) image coupled to a logical partition of the communications environment. Applicants respectfully submit that Rooney makes no mention whatsoever of a MIF image. While Rooney describes logical partitions, it does not describe a MIF image, which is known in the art to be a component of an I/O or channel subsystem. There is no description at all in Rooney of MIF images, and therefore, Rooney does not teach or suggest this aspect of applicants' claimed invention. Since both Coscarella and Rooney fail to describe, teach or suggest this aspect of applicants' claimed invention, applicants respectfully submit that their invention is patentable over the combination of Coscarella and Rooney.

Moreover, in dependent claims 10, 25 and 41, applicants claim that the plurality of MIF images are associated with one or more I/O subsystem images of an I/O subsystem coupled to the central processing complex. The I/O subsystem is configured as a plurality of I/O subsystem images, each I/O subsystem image appearing to the operating system as an independent and complete I/O subsystem. Again, this is not described, taught or suggested in Rooney. While Rooney mentions the word subsystem, it does not teach or suggest an I/O subsystem configured as a plurality of I/O subsystem images, as claimed by applicants.

In Rooney, a subsystem is a logical control unit and not an I/O subsystem configured as a plurality of I/O subsystem images, each appearing to the operating system as a complete and independent I/O subsystem, as claimed by applicants. Therefore, applicants respectfully submit that Rooney does not teach or suggest this aspect of applicants' claimed invention. Since both Coscarella and Rooney fail to teach or suggest this aspect of applicants' claimed

invention, applicants respectfully request an indication of allowability for dependent claims 10, 25 and 41.

For all of the above reasons, applicants respectfully request an indication of allowability for all pending claims.

Should the Examiner wish to discuss this case with applicants' attorney, please contact applicants' attorney at the below listed number.

Respectfully submitted,

Blanche E. Schiller
Blanche E. Schiller
Attorney for Applicants
Registration No.: 35,670

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HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 Columbia Circle
Albany, New York 12203-5160
Telephone: (518) 452-5600
Facsimile: (518) 452-5579